DOCUMENT RESUME

ED 128 679 CG 010 783

AUTHOR Robin, Arthur L.; And Others
TITLE An Approach to Teaching Parents and Adolescents Problem-Solving Communication Skills.
PUB DATE [75]
NOTE 26p.; Paper presented at the Annual Meeting of the Eastern Psychological Association (New York, N.Y., April, 1976)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Adolescents; *Communication Skills; *Conflict Resolution; *Family Counseling; Feedback; *Parent Child Relationship; *Problem Solving; Psychological Studies; Role Playing; Social Reinforcement

ABSTRACT

Parents and adolescents were taught to resolve conflicts concerning rules, responsibilities, and values through the use of problem solving and communication skills. Problem-solving included (1) defining the problem, (2) listing alternative solutions, (3) evaluating the solutions, and (4) planning implementation. Communication skills included (1) clear expression and reception of meaning, (2) appropriate emotive-attentive style, and (3) reflective listening. Twenty-four parent-adolescent dyads were assigned to either a treatment or wait-list control group. Each dyad in the treatment group received five sessions of therapy, during which modeling, guided practice, role-playing, feedback, and social reinforcement were utilized to teach problem solving and communication skills. Treatment produced highly significant increases in problem-solving behavior in structured discussions of hypothetical and real problems. Limited improvement in communication at home was also obtained on self-report measures. It was concluded that the present intervention provides a viable means for treating parentadolescent conflicts. Suggestions for improving generalization and integrating the model into a comprehensive behavioral family therapy were considered. (Author)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED128679

An Approach to Teaching Parents and Adolescents Problem-Solving-Communication Skills

Arthur L. Robin
University of Maryland at Baltimore County
Ronald Kent, K. Daniel O'Leary
Sharon Foster, and Ronald Prinz
State University of New York at Stony Brook

CG 010 783

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Problem-Solving-Communication Skills
Dr. Arthur Robin
Department of Psychology
University of Maryland at
Baltimore County
5401 Wilkens Avenue
Baltimore, Maryland 21228

Abstract

Parents and adolescents were taught to resolve conflicts concerning rules, responsibilities, and values through the use of problem solving and communication skills. Problem-solving included 1) defining the problem, 2) listing alternative solutions, 3) evaluating the solutions, and 4) planning implementation. Communication skills included 1) clear expression and reception of meaning, 2) appropriate emotive-attentive style, and 3) reflective listening.

Twenty-four parent-adolescent dyads were assigned to either a treatment or wait-list control group. Each dyad in the treatment group received five sessions of therapy, during which modeling, guided practice, role-playing, feedback, and social reinforcement were utilized to teach problem solving and communication skills. Treatment produced highly significant increases in problem-solving behavior in structured discussions of hypothetical and real problems. Limited improvement in communication at home was also obtained on self-report measures. It was concluded that the present intervention provides a viable means for treating parent-adolescent conflicts. Suggestions for improving generalization and integrating the model into a comprehensive behavioral family therapy were considered.

An Approach to Teaching Parents and Adolescents Problem-Solving-Communication Skills

An appraisal of the literature on parent-adolescent problems suggests that at present there are few effective interventions for this population. Stuart(1971) has outlined the application of contingency contracting to parent-adolescent conflicts, but attempts to demonstrate the effectiveness of contracting have either been confounded by inadequate controls such as a defector no-treatment group (Stuart & Tripodi, 1973) or unsuccessful (Weathers & Liberman, 1975). Alexander & Parsons (1973) have designed and evaluated a short-term behaviorally-oriented therapy for adolescent delinquents and their parents: their intervention produced superior communication on formal interaction measures and lower recidivism rates than did client-centered discussion or dynamic family counseling; although their study contained methodological problems such as unequal treatment lengths, unspecified alternative treatments, and unclear definitions of recidivism, it was an impressive exploration of a family-style behavioral intervention. Nonbehavioral approaches to parent-adolescent problems have included Parent Effectiveness Training (Gordan, 1970), communication training (Brownstone & Dye, 1973), conjoint family therapy (Ackermann, 1966; Satir, 1967), parent group education (Auerbach, 1968), and non-directive, communication-oriented therapy (Ginott, 1969). Taken together, these five approaches have generated many clinically innovative techniques but little empirical research.

The goal of the present investigation was the development and evaluation of a comprehensive behavioral intervention for treating parent-adolescent conflicts. The conceptual bases for this intervention were supplied by 1) developmental findings concerning adolescence, 2) principles of behavior modification, 3) principles of experimental problem solving, and 4) principles of effective communication.

The literature on adolescent development suggests that most parent-adolescent conflicts center around independence (Conger, 1973; Douvan & Adelson, 1966; Elder, 1968). If parents react to their adolescents' striving for independence in a relatively authoritarian manner, they are likely to spur increased argument, conflict, and other negative consequences (Becker, 1964; Elder, 1968). In contrast, a "democratic" style of child-rearing appears to lead to less conflict than an "authoritarian" style (Conger, 1973; Elder, 1968). Thus, the present intervention was designed to emphasize 1) mutual resolution of disagreements, 2) equalization of decision-making power, and 3) systematic instruction in "independence skills;" for adolescents this included acquisition of repertoires for appropriately seeking and shouldering increased privileges and responsibilities; and for parents, it included acquisition of repertoires for appropriately granting increased privileges and responsibilities. In practice, both parent and adolescent would participate equally in all aspects of a "family-style" behaviorally-oriented therapy.

Specifically, training in problem solving and affective communication were emphasized. The problem-solving model of D'Zurilla & Goldried (1971), derived from industrial-educational settings (Crutchfield, 1969; Davis, 1972; Maier, 1970; Osborn,

1963; Shaftel & Shaftel, 1967), was utilized as the first component of the present intervention. They conceptualized problem solving to include five stages: 1) general orientation; 2) problem definition; 3) generation of alternative solutions; 4) decision making; and 5) verification. The communication model of Piaget (1972), encompassing elements of previous communication training programs (Brownstone & Dye, 1973; Gordon, 1970), was utilized as the second component of the present intervention. Piaget (1972) conceptualized effective communication to include the following skills: 1) clear expression of meaning, 2) accurate decoding and verification of meaning; 3) appropriate emotive expression; 4) attentive listening; and 5) reflection of feeling. Communication training was provided in order to reduce negative parent-adolescent interaction patterns which could interfere with effective problem solving.

Although the problem-solving-communication training model had not been evaluated in its entirety prior to the present investigation, components of it had received empirical support: Kifer, Lewis, Green, & Phillips (1974) demonstrated the feasibility of teaching parent-adolescent dyads negotiation behaviors; Briscoe, Hoffman, & Bailey (1975) successfully instructed members of a community planning board to structure meetings according to a problem-solving model; Arnkoff & Stewart (1975) utilized modeling and videotape feedback to teach college students problem solving for personal use. The present study builds upon these preliminary investigations by evaluating the effectiveness of a comprehensive behavioral problem-solving program for treatment of parent-adolescent conflicts.

Method[1]

Subjects and Therapists

Twelve mother-daughter and twelve mother-son dyads, recruited through local newspaper advertisements, were selected to meet the following criteria: 1) adolescent aged 11 to 14; 2) reports of excessive disagreement concerning rules, responsibilities, and values, 3) absence of psychiatric history, and 4) willingness of parent and adolescent to attend sessions together. Matched on socioeconomic class by the Hollingshead (Note 1) two-factor scale and on communication deficits by parental ratings of arguing, pairs of dyads were randomly assigned to a treatment or waiting-list control group.

Three experienced Ph.D. candidates in clinical psychology served as therapists. Each therapist received weekly supervision from a Ph.D. clinical psychologist throughout the project. Dyads were assigned to therapists on the basis of scheduling convenience, with the constraint that each therapist treated an equal number of mother-son and mother-daughter dyads.

Measures

Parent-adolescent dyads completed three specially constructed assessment measures during standardized sessions conducted before and after the treatment group received therapy.

Verbal Problem Solving Code: In order to provide a sample of problem-solving behavior, each dyad discussed two specific conflicts for ten minutes apiece: the first was the hypothetical Bedtime Problem;[2] the second was a real problem idiosyncratic to each dyad's history. Discussions were audiotaped with the assessor absent from the room. Afterwards, trained observers

recorded parent-adolescent interactions utilizing a five category behavioral code. The categories recorded were:

Problem Definition Response - any explicit identification of the nature of the problem under discussion or any probe for further specification of the problem; Option-Listing Response - any solution or probe for a solution to the problem; Evaluation Response - any opinion about an option along with a reason for that opinion, any prediction of the likely consequences of adopting a particular option, or any probe for further evaluation; Agreement - any interchange in which both participants explicitly agreed to an option; Negative Behavior - curses, commands, threats, and name-calling.[1]

The absolute frequency of each category of verbal behavior was recorded for each ten-minute discussion. An index of total problem-solving behavior was computed by summing the frequencies of Problem Definition, Option-Listing, Evaluation, and Agreement. Frequencies were expressed both for parents and adolescents, individually and for dyads jointly.

Reliability was assessed by having two observers independently recode 50% of the discussions at pre - and post-assessment. Pearson product-moment correlations were computed between the frequencies obtained by the two observers in accordance with the recommendations of Johnson & Bolstad (1973). Near-zero frequencies were obtained on all categories of problem-solving behavior at pre-assessment and on Agreement at post-assessment, reducing the reliability coefficients (median r=.67) as a function of restricted ranges. At post-assessment reliability ranged from r= .58 to r= .97, with a median of r= .85. The following reliabilities were obtained for

dyads: Problem Definition, r= .95; Option-Listing, r= .91; Evaluation, r= .85; Negative Behavior, r= .97; Total Problem-Solving Behavior, r= .80.

Communication Habit Survey - Parts One and Two: Parents and adolescents provided information concerning communication at home by completing two checklists involving five-point ratings: Part One included 28 items concerning the quality and frequency of problem-solving behaviors, negative behaviors, arguing, yelling, fighting, teasing, interrupting, and other communication styles, as well as global impressions of degree of conflict at home; Part Two sampled the degree to which dyads came into conflict about 39 specific subject areas, such as cleaning up the bedroom, helping out around the house, fighting with siblings, etc.

Procedure

D'Zurilla & Goldfried's (1971) model of problem solving was reduced to four steps for the present application: 1) Defining the problem included pinpointing specific behaviors emitted by the parent and adolescent which made a particular subject a source of disagreement. 2) Listing the solutions included generating as many alternative options for resolving the disagreement as possible, religiously adhering to three rules of brainstorming; 1) don't evaluate, just suggest ideas; 2) all ideas are welcome; 3) write down each idea for future reference. 3) Evaluation of options included a detailed review of the positive and negative consequences of the previously listed ideas. For each option, the parent and adolescent were required to state an opinion, give a reason, project consequences, and rate the idea "+" or "-". After evaluating all of the solutions, the dyad reached a final agreement by

selecting one or more options rated "+" by both; if necessary, they negotiated a settlement starting from the option on which they came closest to agreement. 4) Planning the implementation of a solution consisted of deciding upon the logistic details of who, what, when, where, and how for carrying out the selected option.

Throughout treatment the therapist assessed the degree to which each dyad's discussion of problems was characterized by coercive interaction patterns (Patterson & Reid, 1970), including teasing, put-downs, interrupting, sarcasm, inappropriate voice tone, lack of eye contact, etc. As necessary, the therapist taught the dyad to self-monitor these behaviors and replace them with effective communication skills such as reflective listening, visual attention, non-verbal attention, appropriate emotive expression, verification of meaning, etc.

Therapy took place during five one-hour sessions, each of which was divided into three parts. First, the therapist introduced and/or reviewed problem solving through the use of verbal descriptions, written outlines, taped models of other families, and live modeling. Second, the dyad selected and discussed a specific conflict by proceeding through each step of the model. In the first two sessions, hypothetical, nonemotional conflicts were discussed; afterwards, real conflicts which produced serious arguments at home were utilized. A correction procedure served to rapidly shape criterion problem-solving-communication skills: whenever a dyad strayed from criteria, the therapist intervened with 1) a prompt for correct behavior; 2) a socratic discussion aimed at helping the clients to verbalize the deficiency in their

own performances; 3) direct feedback about the nature of their error; 4) intensive role-play of alternative interactional sequences; 5) reverse role-play of the faulty response sequence aimed at helping the clients discriminate the deficiency in their performances; 6) therapist modeling of correct behavior; or 7) "blow-up" (Lazarus, 1971). Social reinforcement was provided contingent upon correct problem-solving-communication performances. Third, during the last part of each session, the therapist provided extensive feedback concerning that week's role-play and discussed the application of the procedure at home.

Results

Three dyads from the waiting list group dropped out at the beginning of the study, and one matched dyad was secured as a replacement. Due to unforeseen circumstances, the replacement dyad was unable to attend the taped discussions at post-assessment, but did complete the Communication Habit Survey by mail. Consequently, the analyses of the Verbal Problem Solving Code were based on 12 treatment and nine waiting list dyads while the analyses of the Communication Habit Survey were available for 12 treatment and 10 waiting list dyads. Treatment by pre-post repeated measures analyses of variance using an unweighted means adjustment for unequal observations per cell were utilized. A significant treatment X pre-post interaction term was interpreted as evidence of the effectiveness of therapy. Prior to the analyses of variance, t-tests carried out on pre-assessment means revealed no significant differences between groups on the dependent measures.

Verbal Problem Solving Code

The frequencies of problem-solving behavior were analyzed for the composite index of total problem solving and for individual categories. Analyses were carried out separately for dyads, parents, and adolescents, and were repeated for both the hypothetical Bedtime and real conflict discussions. Figure 1 presents

---

Insert Figure 1 about here

---

total problem-solving measures for dyads. The treatment group increased its problem-solving by a factor of four on both the hypothetical and real problems, resulting in highly significant interaction terms ($F= 33.17$, $d.f.= 1,19$; $p < .001$; $F= 20.37$, $d.f.= 1,19$, $p < .001$).

As a further examination of the results for individual dyads, frequency distributions of pre-to-post-assessment change scores on total problem-solving behavior were tabulated in Figure 2. Examination of Figure 2 indicates that every dyad in the treatment group improved while only one dyad in the waiting list group improved on the hypothetical problem and three on the real problem. In addition, there is very little overlap in distributions between the two groups.

Insert Figure 2 about

A breakdown of the problem-solving categories for parents and adolescents revealed highly significant increments in problem-solving for parents in the treatment group on the hypothetical ($F= 24.06$; $d.f.= 1,19$; $p < .001$) and real problems ($F= 26.16$; $d.f.=1,19$; $p < .001$),

and for adolescents in the treatment group on the hypothetical ($F= 19.20$; d.f.$= 1,19$; $p < .001$) and real problems ($F=6.21$; d.f.$= 1,19$; $p < .03$). Frequency distributions of change scores for parents and adolescents were comparable to the distributions displayed in Figure 2.

Significant changes on the following individual behavior categories for dyads in the treatment group were evident in non-independent, subsequent analyses: Problem Definition, hypothetical ($F= 17.10$; d.f.$=1,19$; $p < .001$) and real ($F=8.89$; d.f.$=1,19$; $p < .008$) problems; Option Listing, hypothetical ($F=16.07$; d.f.$= 1,19$; $p < .001$) and real ($F=56.48$; d.f.$=1,19$; $p < .001$) problems; and Evaluation, hypothetical ($F=6.21$, d.f.$=1,19$, $p < .03$) and real ($F=6.16$; d.f.$=1,19$; $p < .03$) problems.

The frequency of Negative Behavior failed to change significantly as a function of therapy. Unexpectedly, low frequencies of Negative Behavior were emitted at pre-assessment, precluding significant decrements after therapy. Inspection of individual dyad data revealed that at pre-assessment all of the Negative Behavior was emitted by five treatment and three waiting list dyads. At post-assessment, however, only the waiting list dyads emitted Negative Behavior.

Checklists

Ratings on the checklist measures were analyzed in two ways. First, the mean scores for each item were evaluated employing treatment by pre-post analyses of variance. Second, in order to summarize trends across items, a directionality index was defined as the number of items on which the treatment group improved more

than the waiting list group. The difference between pre- and post-assessment means on an item constituted improvement. The significance of the directionality index was tested with a nonparametric sign test, selected in this case because of the unknown reliability, validity, and population distributions of the checklists. A complete report of the checklist results can be found in Robin (Note 2).

The Communication Habit Survey- Part One provided little evidence that therapy led to consistent use of the problem-solving model at home and consistent decrements in negative behavior. In fact, none of the items describing problem solving or negative behavior produced significant interaction terms. However, there was evidence for a non-specific improvement in parent-adolescent relations in the home; parents reported significantly less interrupting ($F= 9.17$; $d.f.= 1,20$; $p < .007$) and lying ($F= 8.10$; $d.f.= 1,20$; $p < .01$) while adolescents reported near significant trends towards increased understanding of their parents ($F=4.34$; $d.f.= 1,20$; $p < .06$). Furthermore, the directionality index revealed that parents perceived improvements in communication (19 out of 28 items favoring the treatment group, $p < .04$).

In the analysis of the Communication Habit Survey- Part Two, the five specific conflicts rated most severe at pre-assessment were selected; in cases of ties, random selection was utilized. The Top Five Problem Indices, defined as the mean ratings on these conflicts for parents and adolescents, were thus analyzed. No significant improvements occurred on these measures. Interestingly, five subject areas consistently dominated the Top Five Problem

Indices; fighting with siblings, talking back to parents, cleaning up the bedroom, helping out around the house, and putting away clothing.

Discussion

The present study extends the work of Kifer et al. (1974, Briscoe et al. (1975), and Arnkoff & Stewart (1975). In particular, it extends the model of D'Zurilla & Goldfried (1971) to a new population, viz., parent-adolescent dyads, and introduces an integration of communication training (Brownstone & Dye, 1973; Piaget, 1972) with the problem-solving approach. Furthermore, it systematically replicates the work of Alexander & Parsons (1973) by demonstrating the effectiveness of behaviorally-oriented treatments with family problems.

Therapy produced highly significant increases in problem-solving behavior for every dyad in the treatment group while dyads in the waiting list group either remained the same or worsened slightly; these changes reflected increments for both parents and adolescents and increments on three major components of effective problem solving- defining a problem, generating alternative solutions, and evaluating the solutions, suggesting that dyads did in fact acquire specific skills for resolving conflicts. Unfortunately, there were no significant improvements on the Top Five Problem Indices and the problem-solving items of the Communication Habit Survey - Part One, suggesting that problem solving did not generalize to the home; however, there were improvements on items of the Communication Habit Survey - Part One sampling interrupting and lying and on the directionality index for parents; furthermore,

many dyads anecdotally reported successful applications of problem solving. Taken together, these conflicting results suggest that future applications of the intervention might enhance generalization through explicit programming.

First, the therapist could assign as homework practice trials in problem solving, which the dyad would audiotape for review in the next treatment session. Second, the therapist could tailor the intervention to individual families by helping them plan the integration of problem solving into their daily routines; for example, the dyads might schedule regular family conferences as the forum for problem solving or learn to utilize components of the technique at crucial moments of impending argument. Third, the therapist could provide more opportunities for the dyads to "integrate" their problem-solving skills during treatment sessions. Integrations are complete discussions of problems with minimal therapist intervention. In the present study, dyads had limited opportunities for such discussions. More integrations might facilitate the development of smooth, reciprocal problem-solving interchanges not dependent upon therapist prompts for continuity.

Finally, the present intervention has an important implication for behavior modification: it sets the stage for the development of a comprehensive behavioral family therapy as an alternative to parent training (O'Dell, 1974) for parent-child disorders. If parent-adolescent dyads can learn conflict-resolution skills, perhaps entire families could benefit from similar therapeutic undertakings. Within behavioral family therapy, each member of the family would learn to specify his

complaints about family life and utilize the entire range of social influence techniques (Krasner & Ullman, 1973) to modify the responses of other family members. Problem solving would serve for conflicts over values, rules, and responsibilities. Such a comprehensive treatment would combine the breadth of family therapy (Satir, 1967) and the empirical methodology of behavior modification (Bandura, 1969); furthermore, children would become active participants in decisions affecting their lives, fostering democratic child-rearing and recognizing a goal of the recent movement towards child advocacy in the social services (Berlin, 1975).

Reference Notes

1. Hollingshead, A.B. Two factor index of social position. Unpublished manuscript, Yale University, 1958.

2. Robin, A. L. Communication training: An approach to problem solving for parents and adolescents. Unpublished Doctoral Dissertation, State University of New York at Stony Brook, 1975.

References

Ackermann, N. W. Treating the troubled family. New York: Basic Books, 1966.

Alexander, J. F. & Parsons, B. V. Short-term behavioral intervention with delinquent families: impact on family process and recidivism. Journal of Abnormal Psychology, 1973, 81, 219-225.

Arnkoff, D. B. & Stewart, J. The effectiveness of modeling and videotape feedback on personal problem solving. Behavior Research and Therapy, 1975, 13, 127-133.

Auerbach, A.B. Parents learn through discussion. New York: Wiley, 1968.

Bandura, A. Principles of behavior modification. New York: Holt, Rinehart, and Winston, 1969.

Becker, W. C. Consequences of different kinds of parental discipline. In Hoffman, M. L. & Hoffman, L. W. (Eds.), Review of child development research. New York: Russell Sage Foundation, 1964, 169-208.

Berlin, I. N. (Ed.) Advocacy for child mental health. New York: Brunner/Mazel, 1975.

Briscoe, R. V., Hoffman, D. B., & Bailey, J. S. Behavioral community psychology: training a community board to problem solve. Journal of Applied Behavior Analysis, 1975, 8, 157-168.

Brownstone, J. E. & Dye, C. J. Communication workshop for parents of adolescents. Champaign, Illinois: Research Press, 1973.

Conger, J. J. Adolescence and youth. New York: Harper and Row, 1966.

Crutchfied, R. S. Nurturing the cognitive skills of productive thinking. In Life skills in school and society. Washington, D.C.: National Educational Association, 1969.

Davis, G. A. Psychology of problem solving. New York: Basic Books, 1973.

Douvan, E. & Adelson, J. The adolescent experience. New York: Wiley, 1966.

D'Zurilla, T. J. & Goldfried, M. R. Problem solving and behavior modification. Journal of Abnormal Psychology, 1971, 78, 107-126.

Elder, G. H. Adolescent socialization and personaltiy development. Chicago: Rand McNally, 1968.

Ginott, H. G. Between parent and teenager. New York: MacMillan, 1969.

Gordon, T. Parent effectiveness training. New York: Wyden,1970.

Johnson, S. M., & Bolstad, O. D. Methodological issues in naturatistic observation: some problems and solutions for field research. In Hamerlynck, L. A., Handy, L. C., & Mash, E. J. (Eds.), Behavior change: methodology, concepts, and practice. Champaign, Illinois: Research Press, 1973, 7-68.

Kifer, R. E., Lewis, M.A., Green, D. R., & Phillips, E. L. Training predilinquent youths and their parents to negotiate conflict situations. Journal of Applied Behavior Analysis. 1974, 1, 357-364.

Krasner, L. & Ullmann, L. P. Behavior influence and personality. New York: Holt, Rinehart & Winston, 1973.

Lazarus, A. A. Behavior therapy and beyond. New York: McGraw Hill, 1971.

Maier, N. R. Problem solving and creativity. Belmont, California: Brooks/Cole Publishing Company, 1970.

O'Dell, S. Training parents in behavior modification: a review. Psychological Bulletin, 1974, 81, 418-433.

Osborn, A. F. Applied imagination. New York: Scribners, 1967.

Patterson, G. R. & Reid, J. B. Reciprocity and coercion: two facets of social systems. In Neuringer, C. & Michael, J.L. (Eds.), Behavior modification in clinical psychology. New York: Appleton-Century-Crofts, 1970, 133-177.

Piaget, G. W. Training patients to communicate. In Lazarus, A.A. (Ed.), Clinical behavior therapy. New York: Brunner Mazel, 1972, 155-173.

Satir, V. Conjoint family therapy. New York: Science and Human Behavior Books, 1967.

Shaftel, R. R. & Shaftel, G. Role-playing for social values: decision making in the social studies. Englewood Cliffs, New Jersey: Prentice Hall, 1967.

Stuart, R. B. Behavioral contracting within families of delinquents. Journal of Behavior Therapy and Experimental Psychiatry, 1971, 2, 1-11.

Stuart, R. B. & Tripodi, T. Experimental evaluation of three time-constrained behavioral treatments for predelinquents and delinquents. In Rubin, R. D., Brady, J.P., & Henderson, J. D. (Eds.), Advances in behavior therapy (Volume Four). New York: Academic Press, 1973, 1-12.

Weathers, L. & Liberman, R. D. Contingency contracting with families of delinquent adolescents. Behavior Therapy, 1975, 6, 356-366.

Footnotes

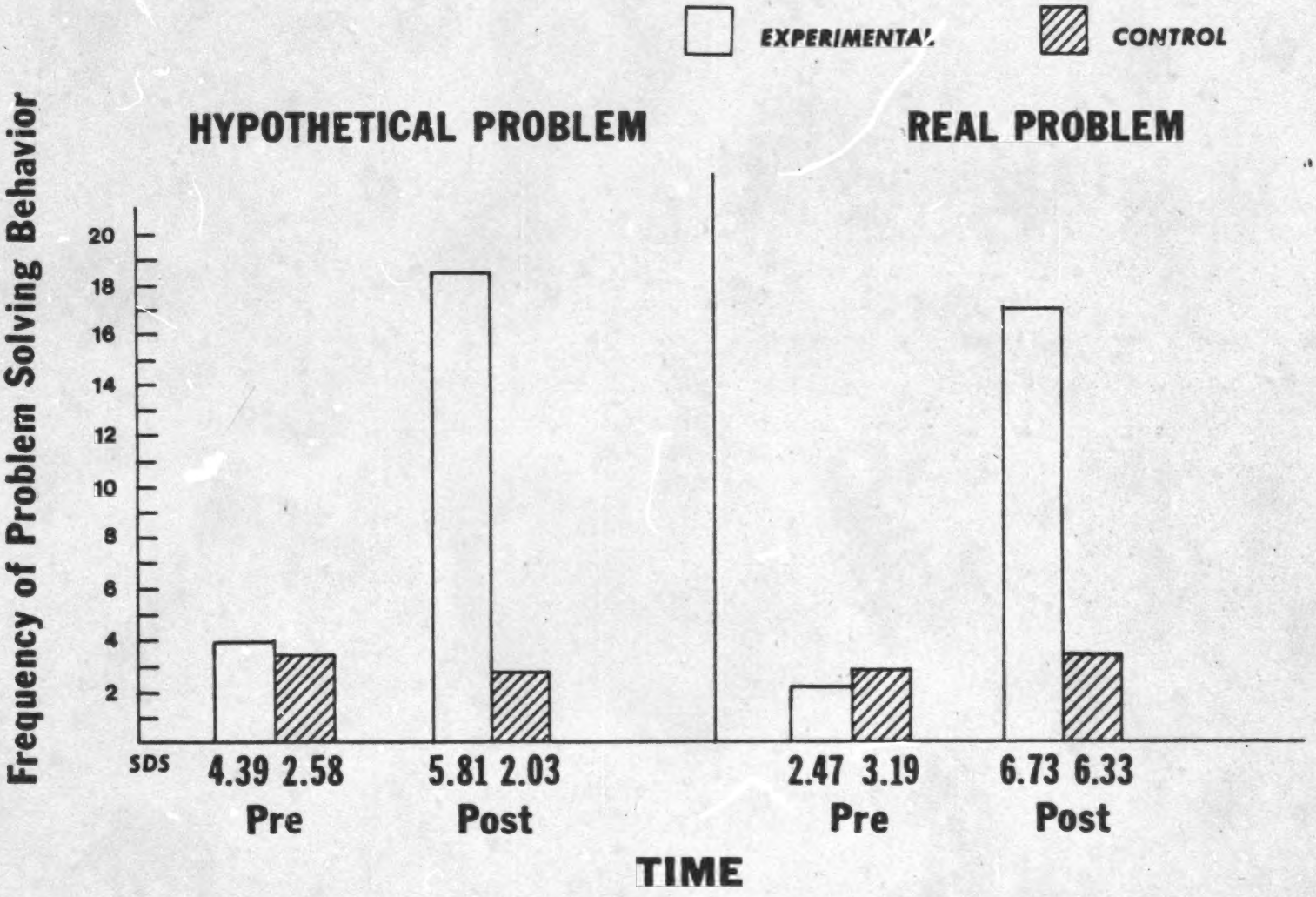
The present intervention was completed as a dissertation project at the State University of New York at Stony Brook in partial fulfillment of the requirements of the degree of Doctor of Philosophy. The thesis was completed by the first author under the guidance of the second and third authors. The fourth and fifth authors served as therapists in the project. Requests for reprints should be sent to Arthur Robin, Department of Psychology, University of Maryland at Baltimore County, 5401 Wilkens Avenue, Baltimore, Maryland 21228.

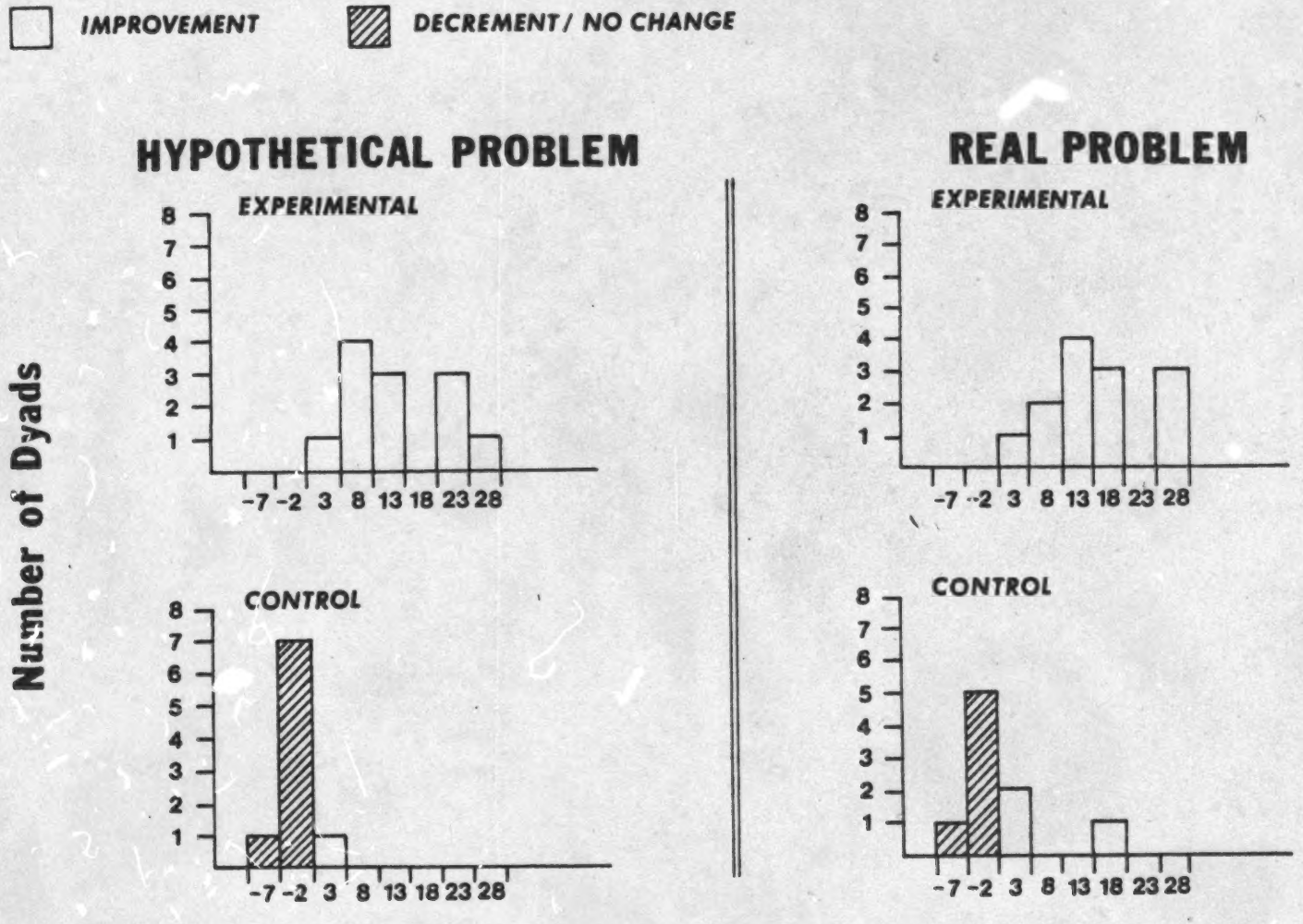
1. An extended version of the method section is available from the senior author.
2. The adolescent wants to stay up later at night than the parents wish him/her to.

Figure Captions

Figure 1. Frequency of mean problem-solving behavior before and after treatment. (Left panel: hypothetical problem. Right panel: real problem. S.D.'s. = standard deviations.)

Figure 2. Distribution of change scores for individual dyads on problem-solving behavior. (Left panel: hypothetical problem. Right panel: real problem. Abscissa: amount of change in four-point class intervals; the numbers represent midpoints. Ordinate: number of dyads. Cross-hatched bars represent decrements or no change while clear bars represent improvements.)


EXPERIMENTAL
CONTROL
HYPOTHETICAL PROBLEM
REAL PROBLEM
Frequency of Problem Solving Behavior
20
18
16
14
12
10
8
6
4
2
SDS
4.39 2.58
5.81 2.03
2.47 3.19
6.73 6.33
Pre
Post
Pre
Post
TIME


IMPROVEMENT
DECREMENT / NO CHANGE
HYPOTHETICAL PROBLEM
REAL PROBLEM
EXPERIMENTAL
CONTROL
Number of Dyads
1
2
3
4
5
6
7
8
-7 -2 3 8 13 18 23 28